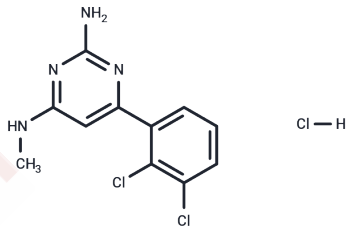
Data Sheet (Cat.No.T2069L)

TargetMol

TH287 hydrochloride

Chemical Properties



CAS No. : 1638211-05-8

Formula: C11H11Cl3N4

Molecular Weight: 305.59

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	TH287 is a selective MTH1 inhibitor(IC50 : 0.8 nM). It causees incorporation of oxidized dNTPs in cancer cells, leading to DNA damage, cytotoxicity and therapeutic responses in patient-derived mouse xenografts.
Targets(IC50)	DNA/RNA Synthesis,MTH1
In vitro	TH287 as first-in-class nudix hydrolase family inhibitor that potently and selectively engage and inhibit the MTH1 protein in cells.?Protein co-crystal structures demonstrate that the inhibitors bind in the active site of MTH1.?The inhibitors cause incorporation of oxidized dNTPs in cancer cells, leading to DNA damage, cytotoxicity and therapeutic responses in patient-derived mouse xenografts[1].

Solubility Information

Solubility	DMSO: 27.5 mg/mL (89.99 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2724 mL	16.3618 mL	32.7236 mL
5 mM	0.6545 mL	3.2724 mL	6.5447 mL
10 mM	0.3272 mL	1.6362 mL	3.2724 mL
50 mM	0.0654 mL	0.3272 mL	0.6545 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Gad H, et al. MTH1 inhibition eradicates cancer by preventing sanitation of the dNTP pool. Nature. 2014 Apr 10;508 (7495):215-21.

Saleh A, et, al. Development and validation of method for TH588 and TH287, potent MTH1 inhibitors and new anti-cancer agents, for pharmacokinetic studies in mice plasma. J Pharm Biomed Anal. 2015 Feb;104:1-11.

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